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VENABLE LLP  
P.O. BOX 34385  
WASHINGTON, DC 20043-9998

EXAMINER
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CHEN, QING

ART UNIT	PAPER NUMBER
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2191

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/20/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/735,855	GOTWALS ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Qing Chen	2191	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 December 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

1. This is the initial Office action based on the application filed on December 16, 2003.
2. **Claims 1-24** are pending.

### *Drawings*

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description:

- Reference number "1100" in Figure 11.

Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application.

The drawings are objected to under 37 CFR 1.83(a) because they fail to show the additional description of Element 1001 in Figure 10 as described in the specification on page 18, paragraph [00068]. Any detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application.

Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is

Art Unit: 2191

to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the Examiner, the Applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### *Specification*

4. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

5. The abstract of the disclosure is objected to because the abstract must commence on a separate sheet, preferably following the claims, under the heading "Abstract" or "Abstract of the Disclosure." Correction is required. See MPEP § 608.01(b) and 37 CFR § 1.72(b).

Art Unit: 2191

6. The disclosure is objected to because of the following informalities:

- The specification contains the following typographical errors:
  - The word “intuitively” is misspelled on page 13, paragraph [00053].
  - The reference number “919” should be changed to “920” on page 17, paragraph [00064].
  - The phrase “within the a of selected models” should presumably read “within the selected models” on page 17, paragraph [00064].
  - The reference number “921” should be changed to “922” on page 18, paragraph [00066].
  - The reference number “1001” should be changed to “1002” on page 18, paragraph [00067].
  - The reference number “1001” is described with two separate descriptions on page 18, paragraphs [00067] and [00068].
  - The figure number in “(see the lower half of Figure 13)” should presumably read “(see the lower half of Figure 12)” on page 18, paragraph [00069].
  - The figure number in “FIG. 4” should be changed to “FIG. 14” on page 20, paragraph [00074].
  - The article “an” should be changed to “a” in “an network appliance” on page 20, paragraph [00074].

Appropriate correction is required.

***Claim Objections***

7. **Claims 8, 12, 16, and 20** are objected to because of the following informalities:

- **Claim 8** contains a typographical error: “a high-level instances structure query” should presumably read “a high-level instance structure query.”
- **Claims 12 and 20** contain the following typographical errors:
  - The word “node” in “a plurality of node” should be changed to plural form.
  - A semicolon should be added after the “generating a hierarchical model ...” limitation.
  - The word “and” should be added after the second-to-last limitation.
- **Claim 16** contains a typographical error: a whitespace character should be added between the comma (,) and the word “wherein.”

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. **Claims 12-24** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

**Claims 12 and 20** recite the limitation “the hierarchical models.” There is insufficient antecedent basis for this limitation in the claims. In the interest of compact prosecution, the Examiner subsequently interprets this limitation as reading “the hierarchical model” for the purpose of further examination.

**Claims 13-16** depend on Claim 12 and, therefore, suffer the same deficiency as Claim 12.

**Claims 21-24** depend on Claim 20 and, therefore, suffer the same deficiency as Claim 20.

**Claim 17** recites the limitation “at least one of generate and select at least one model appropriate for the software application.” However, it is unclear to the Examiner as to what action is performed on the recited limitation, since the recited limitation is not modified by an active verb. In the interest of compact prosecution, the Examiner subsequently interprets this limitation as reading “performing at least one of generate and select at least one model appropriate for the software application” for the purpose of further examination.

**Claims 18 and 19** depend on Claim 17 and, therefore, suffer the same deficiency as Claim 17.

**Claim 19** recites the limitation “at least one of create a new model, edit an existing model, and automatically generate a model.” However, it is unclear to the Examiner as to what

Art Unit: 2191

action is performed on the recited limitation, since the recited limitation is not modified by an active verb. In the interest of compact prosecution, the Examiner subsequently interprets this limitation as reading “performing at least one of create a new model, edit an existing model, and automatically generate a model” for the purpose of further examination.

**Claim 21** recites the limitation “each node.” There is insufficient antecedent basis for this limitation in the claim. In the interest of compact prosecution, the Examiner subsequently interprets this limitation as reading “each root node” for the purpose of further examination.

**Claim 22** recites the limitation “the computer readable memory.” There is insufficient antecedent basis for this limitation in the claim. In the interest of compact prosecution, the Examiner subsequently interprets this limitation as reading “a computer readable memory” for the purpose of further examination.

***Claim Rejections - 35 USC § 101***

10. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

11. **Claims 1-8 and 17-24** are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.



**Claims 1-8** are directed to systems. However, the recited components of the systems appear to lack the necessary physical components (hardware) to constitute a machine or manufacture under § 101. Therefore, these claim limitations can be reasonably interpreted as computer program modules—software *per se*. The claims are directed to systems of functional descriptive material *per se*, and hence non-statutory.

The claims constitute computer programs representing computer listings *per se*. Such descriptions or expressions of the programs are not physical “things.” They are neither computer components nor statutory processes, as they are not “acts” being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer, which permit the computer program’s functionality to be realized. In contrast, a claimed computer-readable medium encoded with a computer program is a computer element, which defines structural and functional interrelationships between the computer program and the rest of the computer, that permits the computer program’s functionality to be realized, and is thus statutory. See *Lowry*, 32 F.3d at 1583-84, 32 USPQ2d at 1035.

The result of **Claims 1-8** is directed to the act of “presenting,” which does not appear to be a tangible result so as to constitute a practical application of the idea. The act of “presenting” is merely a thought or an abstract idea and does not appear to produce a tangible result even if the step of presentation does occur, since the result of that presentation is not conveyed in the real world. The result is a presentation, which is neither used in a disclosed practical application nor made available for use in a disclosed practical application. It also does not appear that the

Art Unit: 2191

usefulness of the presentation can be realized from the claimed steps to support a disclosed specific, substantial, and credible utility so as to produce a useful result.

Therefore, the claims do not meet the statutory requirement of 35 U.S.C. § 101, since the claims are not directed to a practical application of the § 101 judicial exception producing a result tied to the physical world.

**Claims 17-24** recite machine accessible medium as a claimed element. However, it is noted that the specification does not provide an explicit definition of what constitutes a machine accessible medium. In addition, the word “accessible” appears to imply that the program instructions are accessed without being stored first, such as through a transmission media (*e.g.*, electrical signals, carrier wave, etc.). Consequently, the machine accessible medium can be reasonably interpreted as carrying electrical signals. Furthermore, although the claims recite the program instructions as being contained on the machine accessible medium, it does not preclude the interpretation of the machine accessible medium as carrying electrical signals, since the program instructions are not claimed as being tangibly embodied (stored) on the machine accessible medium.

Claims that recite nothing but the physical characteristics of a form of energy, such as a frequency, voltage, or the strength of a magnetic field, define energy or magnetism *per se*, and as such are non-statutory natural phenomena. *O'Reilly v. Morse*, 56 U.S. (15 How.) 62, 112-14 (1853). Moreover, it does not appear that a claim reciting a signal encoded with functional descriptive material falls within any of the categories of patentable subject matter set forth in § 101.

***Claim Rejections - 35 USC § 102***

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

13. **Claims 1-4, 6, 8, 9, 11-17, 19, and 20-24** are rejected under 35 U.S.C. 102(e) as being anticipated by **Barritz et al.** (US 6,519,766).

As per **Claim 1**, **Barritz et al.** disclose:

- a data engine adapted to identify profile data corresponding to low-level instances of a software application (*see Figure 1: 104; Column 4: 20-23, "... data gathering component 104 gathers data on the sequential execution logic and performance of a subject program 110."*);
- a model library adapted to store at least one model, the at least one model having high-level instances (*see Column 4: 33-35, "The processing computers can be mainframe computers minicomputers or personal computers."; Column 4: 24-27, "The data gathered on subject program 110 by data gathering component 104 is transferred to analysis component 106 for analysis and creation of a specialized data structure referred to as a "path map.""*);
- a model mapping engine adapted to at least one of query the data engine to obtain a list of the high-level instances, query the profile data, and map the profile data to the high-level

Art Unit: 2191

instances (see Figure 1: 106; Column 9: 51-54, "During the data reduction phase 502, the transaction and event data to be analyzed are selected and a data structure representing an internal map of the recorded events is created which relates the recorded events to one another. "); and

- a visualization system adapted to present the profile data in terms of the high-level instances (see Figure 1: 108; Column 10: 15-25, "... a specialized data structure, referred to as a "path map," is build. The path map comprises a number of path element control blocks ("PECBs") which are created from the event data selected in the first data reduction phase task 602. ").

As per **Claim 2**, the rejection of **Claim 1** is incorporated; and Barritz et al. further disclose:

- wherein the visualization system is at least one of a sampling-based profile visualization system and a call graph profile visualization system (see Column 10: 15-25, "... a specialized data structure, referred to as a "path map," is build. The path map comprises a number of path element control blocks ("PECBs") which are created from the event data selected in the first data reduction phase task 602. ").

As per **Claim 3**, the rejection of **Claim 2** is incorporated; and Barritz et al. further disclose:

- wherein the profile data is sampling-based profile data and the sampling-based profile visualization system is adapted to present the sampling-based profile data via an architecture

Art Unit: 2191

view (see Column 6: 58-64, "The initial task 302 performed by data gathering component 104 gets parameters from the user specifying the data to be gathered. For example, the user may be asked to specify the names of the transactions to be monitored for profiling."; Column 41: 38-40, "In addition to the path map, other data, both captured and calculated can be presented to the user in the form of output tables, charts, graphs, reports, etc.").

As per **Claim 4**, the rejection of **Claim 2** is incorporated; and Barritz et al. further disclose:

- wherein the profile data is call graph profile data and the call graph profile visualization system is adapted to present the call graph profile data via a hierarchical view (see Figure 2; Column 10: 15-25, "... a specialized data structure, referred to as a "path map," is build. The path map comprises a number of path element control blocks ("PECBs") which are created from the event data selected in the first data reduction phase task 602." and "The path formed by these PECBs is a logical map showing how each recorded event relates, in order of execution, to each other related event.").

As per **Claim 6**, the rejection of **Claim 1** is incorporated; and Barritz et al. further disclose:

- a model library browser adapted to at least one of create, edit, automatically generate, and select the at least one model (see Figure 1: 106; Column 10: 15-25, "... a specialized data structure, referred to as a "path map," is build. The path map comprises a number of path

*element control blocks ("PECBs") which are created from the event data selected in the first data reduction phase task 602. ").*

As per **Claim 8**, the rejection of **Claim 1** is incorporated; and Barritz et al. further disclose:

- wherein the model mapping engine is adapted to perform at least one of a top-level instance query, a high-level instance structure query, a high-level instance flattening query, and a profile data query (*see Column 5: 14-17, "... query a database ... "*).

As per **Claim 9**, Barritz et al. disclose:

- mapping profile data of a software application to low-level instances of the software application (*see Column 9: 51-54, "During the data reduction phase 502, the transaction and event data to be analyzed are selected and a data structure representing an internal map of the recorded events is created which relates the recorded events to one another. ";*

- performing at least one of generating and selecting at least one model appropriate for the software application, the at least one model having high-level abstractions (*see Column 10: 15-25, "... a specialized data structure, referred to as a "path map," is build. The path map comprises a number of path element control blocks ("PECBs") which are created from the event data selected in the first data reduction phase task 602. ";*

- applying the at least one model to the profile data to map the low-level instances to the high-level abstractions (*see Column 10: 15-25, "Each PECB initially contains data for one*

Art Unit: 2191

*recorded event, although the PECBs in the final path map are likely to contain data on more than one recorded event.*"); and

- creating visualizations of the high-level abstractions (*see Column 10: 15-25, "... a specialized data structure, referred to as a "path map," is build.*").

As per **Claim 11**, the rejection of **Claim 9** is incorporated; and Barritz et al. further disclose:

- wherein said performing at least one of generating and selecting comprises at least one of creating a new model, editing an existing model, and automatically generating a model (*see Column 10: 15-25, "... a specialized data structure, referred to as a "path map," is build. The path map comprises a number of path element control blocks ("PECBs") which are created from the event data selected in the first data reduction phase task 602.*").

As per **Claim 12**, Barritz et al. disclose:

- collecting profile data of a software application (*see Column 4: 20-23, "... data gathering component 104 gathers data on the sequential execution logic and performance of a subject program 110.*");
- selecting at least one model to analyze the profile data, the at least one model having top-level instances (*see Column 10: 15-25, "... a specialized data structure, referred to as a "path map," is build. The path map comprises a number of path element control blocks ("PECBs") which are created from the event data selected in the first data reduction phase task 602.*");

Art Unit: 2191

- retrieving the top-level instances (*see Column 11: 58-60, "PECB chain building begins by obtaining an event record from the file of sorted and selected event records ..."*);
- creating root node for each top level instance (*see Column 11: 60-62, "... a PECB is built ... from the event record selected ..."*);
- generating a hierarchical model for each root node, the hierarchical model having a plurality of child nodes (*see Column 11: 62-65, "The PECB is a multi-threadable control block which will contain data about collected occurrences of the subject event and will be linked to events which precede and/or follow it in the PECB chain."*);
- associating the profile data with the plurality of child nodes (*see Column 12: 39-43, "The event duration for each event is written into the PECB for that event. An "event count" is also written into each PECB indicating the number of times the associated event was executed (in the sequences represented by the PECB chain) in all the recorded instances of the transaction."*); and
- displaying the hierarchical model (*see Column 6: 23-25, "The output, displayed on a screen, printed, or stored for future use is a path diagram that reflects the actual processing flow of subject program 210."*).

As per **Claim 13**, the rejection of **Claim 12** is incorporated; and Barritz et al. further disclose:

- wherein the generating is done recursively (*see Column 12: 31-34, "Decision 910 creates a loop by which PECBs are built and chained as described above until a PECB for the last event for the current transaction instance has been built and chained."*).



As per **Claim 14**, the rejection of **Claim 12** is incorporated; and Barritz et al. further disclose:

- traversing each hierarchical model to obtain a list of functions within the software application (*see Column 12: 13-15, "The PECB will also contain a number of pointers for linking the PECB to other PECBs before and after it on the PECB chain."*); and
- creating a child node for each function (*see Column 12: 27-31, "Chaining is accomplished by writing a forward pointer in the pervious PECB which points to the current PECB, and by writing a backward pointer in the current PECB which points to the previous PECB in order to maintain the preferable two-way linkage."*).

As per **Claim 15**, the rejection of **Claim 12** is incorporated; and Barritz et al. further disclose:

- wherein the profile data is sampling-based profile data (*see Column 6: 58-64, "The initial task 302 performed by data gathering component 104 gets parameters from the user specifying the data to be gathered. For example, the user may be asked to specify the names of the transactions to be monitored for profiling."*).

As per **Claim 16**, the rejection of **Claim 12** is incorporated; and Barritz et al. further disclose:

- wherein the profile data is call graph profile data (*see Figure 2; Column 10: 15-25, "... a specialized data structure, referred to as a "path map," is build. The path map comprises*

Art Unit: 2191

*a number of path element control blocks ("PECBs") which are created from the event data selected in the first data reduction phase task 602." and "The path formed by these PECBs is a logical map showing how each recorded event relates, in order of execution, to each other related event.").*

**Claims 17 and 19** are machine accessible medium claims corresponding to the method claims above (Claims 9 and 11) and, therefore, are rejected for the same reasons set forth in the rejections of Claims 9 and 11.

**Claims 20-24** are machine accessible medium claims corresponding to the method claims above (Claims 12-16) and, therefore, are rejected for the same reasons set forth in the rejections of Claims 12-16.

### ***Claim Rejections - 35 USC § 103***

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. **Claims 5, 10, and 18** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Barritz et al.** (US 6,519,766) in view of **Fagg, III et al.** (US 5,960,419).

As per **Claim 5**, the rejection of **Claim 1** is incorporated; however, Barritz et al. do not disclose:

- an expert system adapted to provide high-level advice relating to the low-level instances of the software application.

Fagg, III et al. disclose:

- an expert system adapted to provide high-level advice relating to the low-level instances of the software application (*see Column 1: 42-52, "Computer-based decision making systems, often known as expert systems, provide advice or opinion based on facts entered into the system by the user."*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Fagg, III et al. into the teaching of Barritz et al. to include an expert system adapted to provide high-level advice relating to the low-level instances of the software application. The modification would be obvious because one of ordinary skill in the art would be motivated to permit the user to exercise intellectual control over decisions made in the process of completing the task (*see Fagg, III et al. – Column 1: 20-22*).

As per **Claim 10**, the rejection of **Claim 9** is incorporated; however, Barritz et al. do not disclose:

- providing advice to improve performance of the software application in terms of the high-level abstractions.

Fagg, III et al. disclose:

- providing advice to improve performance of the software application in terms of the high-level abstractions (*see Column 1: 42-52, "Computer-based decision making systems, often known as expert systems, provide advice or opinion based on facts entered into the system by the user."*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Fagg, III et al. into the teaching of Barritz et al. to include providing advice to improve performance of the software application in terms of the high-level abstractions. The modification would be obvious because one of ordinary skill in the art would be motivated to permit the user to exercise intellectual control over decisions made in the process of completing the task (*see Fagg, III et al. – Column 1: 20-22*).

**Claim 18** is rejected for the same reason set forth in the rejection of Claim 10.

16. **Claim 7** is rejected under 35 U.S.C. 103(a) as being unpatentable over Barritz et al. (US 6,519,766) in view of Ben-Romdhane et al. (US 2004/0031015).

As per **Claim 7**, the rejection of **Claim 6** is incorporated; however, Barritz et al. do not disclose:

- wherein the model library browser includes at least one of a model editor adapted to edit the at least one model, and a model generator adapted to generate the at least one model.

Ben-Romdhane et al. disclose:

- wherein the model library browser includes at least one of a model editor adapted to edit the at least one model, and a model generator adapted to generate the at least one model (*see Figure 1: 2 and 5; Paragraph [0056], "Source code 1 is analyzed by model generator 2 to create information model 3." and "Information model 3 can also be enriched by model editor 5, which allows supporting information and documentation to be associated with information model 3."*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Ben-Romdhane et al. into the teaching of Barritz et al. to include wherein the model library browser includes at least one of a model editor adapted to edit the at least one model, and a model generator adapted to generate the at least one model. The modification would be obvious because one of ordinary skill in the art would be motivated to divine any meaningful macro structure from the body of software (*see Ben-Romdhane et al. – Paragraph [0011]*).

### ***Conclusion***

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

A. **Friedrich et al.** (US 5,276,877) disclose automatic performance analysis and capacity planning of computer systems, which have been modified in response to interactive operator input.

B. **Janovski et al.** (US 5,726,914) disclose a computer-implemented process and computer architecture for performance analysis.

C. **Ito** (US 5,761,674) discloses an integrated construction project information management system having as its kernel a project model, which is constructed by combining together a product model and a process model.

D. **Dangelo et al.** (US 5,801,958) disclose a technique for hierarchical display of control and dataflow graphs allowing a user to view hierarchically filtered control and dataflow information related to a design.

E. **Srivastava et al.** (US 5,963,740) disclose a method and apparatus for monitoring the performance of computer systems by instrumenting programs.

F. **Hamada et al.** (US 6,240,549) disclose a method and a system for displaying information of a program under development in a development environment of object oriented programming.

G. **Ball et al.** (US 6,904,590) disclose a process of checking models of programs to enhance program analysis.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Qing Chen whose telephone number is 571-270-1071. The Examiner can normally be reached on Monday through Thursday from 7:30 AM to 4:00 PM. The Examiner can also be reached on alternate Fridays.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Wei Zhen, can be reached on 571-272-3708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2191

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the TC 2100 Group receptionist whose telephone number is 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

QC / QC  
February 12, 2007

  
WEI ZHEN  
SUPERVISORY PATENT EXAMINER